Background Press Information

Municipal Solid Waste Reduction: Is It Worth It?

The United States recycled 57 million tons of municipal solid waste (MSW) in 1996. EPA has set a goal of recycling 35 percent of municipal solid waste by 2005 or about 83 million tons. The benefits of reaching this goal of recycling 35 percent of our municipal solid waste by 2005 include resource conservation, saving energy, decreasing greenhouse gas emissions, and using less landfill space. (*Recycling...For the Future: Consider the Benefits*, White House Task Force on Greening the Government Through Waste Prevention and Recycling, Task Force on Recycling, November 1998, www.ofee.gov)

Resource Conservation

Recycling reduces all categories of health risks and pollution from exploration, extraction, and processing activities associated with raw material production. Material recycled in 1996 had a value of \$3.6 billion. The value of the 83 million tons of material that would be recycled in 2005 at a recycling rate of 35 percent is \$5.2 billion. The US relies heavily on secondary material to support our economy. The steel industry uses recovered steel to produce 67 percent of its output. The aluminum industry uses secondary aluminum for 42 percent of the aluminum we manufacture and the paper industry relies on secondary fiber for 38 percent of its output.

Energy

Products made from the 57 million tons of MSW recycled in 1996 used 408 trillion Btu's less energy than would have been needed to make those goods from virgin materials. That is enough energy to supply 4 million households with energy for a year. The energy saved from using the 83 million tons secondary material in 2005 would be

605 trillion Btu's or enough energy for 6 million households for a year.

Greenhouse Gas Emissions

Use of the 57 million tons of recycled materials instead of virgin materials resulted in a reduction in greenhouse gas emissions equivalent to 33 million tons of carbon or the emissions saved from removing 25 million cars from the roads. The material recycled in 2005–83 million tons at a national recycling rate of 35 percent-would reduce greenhouse gas emissions by an equivalent of 48 million tons of carbon. That would equal the emissions from 36 million automobiles. These savings are because carbon emissions from making steel, copper, glass, or paper from virgin materials instead of recycled materials are 4 to 5 times higher. For aluminum, emissions are about 40 times higher for virgin ore when compared to making aluminum from used beverage containers.

Landfill Space

The 57 million tons of municipal solid waste (MSW) recycled in 1996 represent 130 million cubic yards of landfill space or enough to require 64 additional landfills large enough to take the MSW from both Detroit and Dallas for a year. The 83 million tons that would be recycled in 2005, assuming we reach our goal of 35 percent recycling, represent 195 million cubic yards or enough to require an additional 92 landfills large enough to take the MSW from both Detroit and Dallas for a year.